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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,496	03/24/2004	Anuschirvan Peyman	446.016-DIV	5709
47888	7590	12/01/2005	EXAMINER	
HEDMAN & COSTIGAN P.C. 1185 AVENUE OF THE AMERICAS NEW YORK, NY 10036			TRUONG, TAMTHOM NGO	
			ART UNIT	PAPER NUMBER
			1624	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/808,496

Applicant(s)

PEYMAN ET AL.

Examiner

Tamthom N. Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 8 and 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **FINAL ACTION**

Applicant's amendment of 09-01-2005 has been fully considered. Applicant's terminal disclaimer has overcome the previous rejection of Obviousness-type Double Patenting, and thus, said rejection is withdrawn herein. However, the amended claims have not overcome the previous rejections of 112/1<sup>st</sup> and 2<sup>nd</sup> paragraphs. Thus, those rejections remain outstanding for the following reasons. The amended claims also raise new issues of 112/2<sup>nd</sup> paragraph.

Claims 7, 9 and 10 are cancelled.

Claims 1-6, 8 and 11 are pending.

#### ***Claim Rejections - 35 USC § 112, Second Paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-6, 8 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The following reasons apply:

a. Contrary to applicant's remark, the term "residue" (e.g., "arylene residue") has not been deleted from claim 1. Thus, said term still renders claim 1 indefinite because it suggests an incomplete or impartial structure. Applicant is suggested to use the term "group".

- b. In claim 1, the definition of X still recites a set of substituents within parentheses (i.e., “(amino-(C<sub>1</sub>-C<sub>6</sub>)-alkyl-NH-, hydroxyl-(C<sub>1</sub>-C<sub>6</sub>)-alkyl-O-, hydroxyl-(C<sub>1</sub>-C<sub>6</sub>)-alkyl-S-, and -NH-C(O)-R<sup>6</sup>)”). Within this set, it is unclear if X is a combination of all those substituents, or X only represents one of those at any one point. Applicant is suggested to delete the parentheses.
- c. Formula IIIa has two different core structures. Thus, said formula represents two different sets of compounds.
- d. Variable “B” bears no structural relationship to formulae IIIa and IIIb. Furthermore, all three formulae seem incomplete because it is unclear where the location of variable “B” is.
- e. Claims 2-6, 8 and 11 are rejected as being dependent on claim 1.

***Claim Rejections - 35 USC § 112, First Paragraph***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. **New Matter:** Claims 1-6, 8 and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the

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claimed invention. Claim 1 recites formulae IIIa and IIIb. Although said formulae have support in the specification, the subgenera they represent do not have sufficient written description because the location of variable "B" is indeterminate. Note, as written, substituent B could be anywhere. That is, it could be on the tetrahydronaphthyridine, on the ring having Z, on Y, X, or G, etc. Such a subgenus does not have support in the instant disclosure, and therefore, it lacks a written description.

Claims 1-6, 8 and 11 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the make and use of compounds of formula I (with a purine ring), does not reasonably provide enablement for the make and use of those compounds of formulae IIIa and IIIb (i.e., those of 3-deazapurine, 7-deazapurine, or 7-deaza-8-azapurine). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

The rejection is maintained for the reasons stated in the previous action and for the reason below:

Applicant asserted that "the specification has to be specific examples and set forth the structural formulae on page 17 which formulae have now been inserted into the claims and the compounds can be prepared by replacing the purine molecule by the corresponding deazapurine molecule and there is no scientific reason why the reaction would not take place..."

However, the corresponding deazapurine molecules of formulae IIIa and IIIb might not

have the same solubility with the reagents or solvents used for purine. They might not react under the same temperature or reaction condition either. Both the generic process and examples are directed to compounds of purine, and nothing else. Therefore, given the unpredictable nature of the chemical art, it would require undue experimentation to make compounds of formulae IIIa and IIIb.

*Specification*

3. The disclosure is objected to because of the following informalities:

The specification still has formula IIIa represents two different sets of compounds.

Appropriate correction is required.

No pending claim is allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamthom N. Truong whose telephone number is 571-272-0676. The examiner can normally be reached on M-F (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).




**Tamthom N. Truong**

**Examiner**

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11-21-05



**JAMES O. WILSON**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 1600**